

Notice of Allowability

Application No.

10/811,523

Examiner

Dismerly E. Mercedes

Applicant(s)

MITCHELL ET AL.

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amend. filed 8/18/2005.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. Applicant's amendment filed 8/~~10~~/2005 has been fully considered and entered.

Reasons for Allowance

2. Claims 1-24 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Independent Claims 1, 14, & 23 & 24 are allowable over the prior art of record, since the cited references, in particular Ziporovich (US 5,737,342); Ziporovich (US 5,886,842); Demicheli et al. (US 6,369,741) and Cyrusian (US 6,519,103 B2); Bhaumik et al. (US 6,429,988 B1); taken alone or in combination, do not teach or suggest: *a controller, coupled to the DAC circuit, for determining a read head channel amplitude based upon generating at least two input signals of different amplitudes, obtaining a VGA gain code associated with the at least two input signals of different amplitudes and calculating an ADC code spread using code received from the ADC.*

Independent Claim 10 is allowable over the prior art of record, since the cited references, in particular Ziporovich (US 5,737,342); Ziporovich (US 5,886,842); Demicheli et al. (US 6,369,741) and Cyrusian (US 6,519,103 B2); Bhaumik et al. (US 6,429,988 B1); taken alone or in combination, do not teach or suggest: *an analog-to-digital converter (ADC), coupled to the VGA, for producing an ADC code spread in response to the amplified signals; memory for storing the ADC code spread associated with the two input signals and two VGA gain codes associated with the two input signals and corresponding high and low DAC control signals; and a processor, coupled to the memory, for calculating a read head channel amplitude using an equation derived from the amplitude of the two input signals, the ADC code spread associated with the two input signals and the two VGA gain codes associated with the two input signals and corresponding high and low DAC control signals.*

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Ziporovich (US 5,737,342); Ziporovich (US 5,886,842); Demicheli et al. (US 6,369,741) and Cyrusian (US 6,519,103 B2); Bhaumik et al. (US 6,429,988 B1); Cyrusian et al. (US 6,661,590 B2); Imaizumi (US 6,891,885 B2); Reed et al. (US 5,854,714); Chainer et al. (US 6,476,989 B1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dismery E. Mercedes whose telephone number is 571-272-7558. The examiner can normally be reached on Monday - Friday, from 9:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Dismery E Mercedes

Examiner

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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**